In the Claims

1. (presently third time amended) A method for making a proton conducting polymeric membrane, comprising

dissolving a polymer in an organic solvent to form a polymer solution;

adding an oxyacid to the polymer solution;

casting the oxyacid-containing polymer solution onto a casting surface; and

removing the organic solvent so as to form a proton conducting polymeric membrane,

wherein the oxyacid is ~~a molecular acid~~ selected from the group consisting of boric, carbonic, cyanic, isocyanic, silicic, nitric, nitrous, phosphoric, phosphorous, hypophosphorous, arsenic, arsenious, antimonic, sulfuric, sulfurous, selenic, selenious, telluric, chromic, dichromic, perchloric, chloric, chlorous, hypochlorous, bromic, bromous, hypobromous, periodic, iodic, hypoiodous, permanganic, manganic, pertechnetic, technetic, perrhennic, rehnnic acids, and their condensation products and optionally bears one or more groups selected from the group consisting of alkyl, fluoroalkyl, alkoxy, flouroalkoxy, alkylamino, fluoroalkylamino, aryl, aryloxy, and arylamino groups, and

wherein the aryl, aryloxy or aryloamino groups optionally bear one or more functionality selected from the group consisting of halo, alkyl, fluoroalkyl, alkoxy, fluoroalkoxy, alkylamino, and fluoroalkylamino groups.

2. (original) The method of claim 1 further comprising adding water to the oxyacid-containing polymer solution in a molar ratio equivalent to the oxyacid.

3. (original) The method of claim 1 further comprising concentrating the oxyacid-containing polymer solution prior to casting the oxyacid-containing polymer solution onto the casting surface.

4. (original) The method of claim 1 wherein the polymer is selected from polyphosphazenes, polyalkenes, polyacrylics, polyvinyl ethers, polyvinylhalides, polystyrenes, polyesters, polyurethanes, and polyamides.

5. (previously amended) A method for making a proton conducting polymeric membrane, comprising

dissolving a polymer in an organic solvent to form a polymer solution;

adding an oxyacid to the polymer solution;

casting the oxyacid-containing polymer solution onto a casting surface; and

removing the organic solvent so as to form a proton conducting polymeric membrane, wherein the polymer is a polyphosphazene.

6. (original) The method of claim 1 wherein the organic solvent is tetrahydrofuran.

7. (original) The method of claim 1 wherein the oxyacid is selected from boric, carbonic, cyanic, isocyanic, silicic, nitric, nitrous, phosphoric, phosphorous, hypophosphorous, arsenic, arsenious, antimonic, sulfuric, sulfurous, selenic, selenious, telluric, chromic, dichromic, perchloric, chloric, chlorous, hypochlorous, bromic, bromous, hypobromous, periodic, iodic, hypoiodous, permanganic, manganic, pertechnetic, technetic, perrhennic, rehnnic acids, and their condensation products.

8. (previously amended) The method of claim 5 wherein the oxyacid is phosphorous oxychloride.

9. (original) The method of claim 1 wherein the casting surface is formed of or coated with polytetrafluoroethylene.

10. (original) The method of claim 1 wherein the organic solvent is removed by evaporation.

11. (original) A proton conducting polymeric membrane comprising a mixture of a polyphosphazene and an oxyacid.

12. (presently third time amended) A proton conducting polymeric membrane made by a method comprising

dissolving a polymer in an organic solvent to form a polymer solution;

adding an oxyacid to the polymer solution;

casting the oxyacid-containing polymer solution onto a casting surface; and

removing the organic solvent so as to form a proton conducting polymeric membrane,

wherein the oxyacid is ~~a molecular acid~~ selected from the group consisting of boric, carbonic, cyanic, isocyanic, silicic, nitric, nitrous, phosphoric, phosphorous, hypophosphorous, arsenic, arsenious, antimonic, sulfuric, sulfurous, selenic, selenious, telluric, chromic, dichromic, perchloric, chloric, chlorous, hypochlorous, bromic, bromous, hypobromous, periodic, iodic, hypoiodous, permanganic, manganic, pertechnetic, technetic, perrhennic, rehnnic acids, and their condensation products and optionally bears one or more groups selected from the group

consisting of alkyl, fluoroalkyl, alkoxy, flouroalkoxy, alkylamino, fluoroalkylamino, aryl, aryloxy, and arylamino groups, and

wherein the aryl, aryloxy or aryloamino groups optionally bear one or more functionality selected from the group consisting of halo, alkyl, fluoroalkyl, alkoxy, fluoroalkoxy, alkylamino, and fluoroalkylamino groups.

13. (presently third time amended) A fuel cell comprising a proton conducting polymeric membrane made by a method comprising

dissolving a polymer in an organic solvent to form a polymer solution;

adding an oxyacid to the polymer solution;

casting the oxyacid-containing polymer solution onto a casting surface; and

removing the organic solvent so as to form a proton conducting polymeric membrane,

wherein the oxyacid is ~~a molecular acid~~ selected from the group consisting of boric, carbonic, cyanic, isocyanic, silicic, nitric, nitrous, phosphoric, phosphorous, hypophosphorous, arsenic, arsenious, antimonic, sulfuric, sulfurous, selenic, selenious, telluric, chromic, dichromic, perchloric, chloric, chlorous, hypochlorous, bromic, bromous, hypobromous, periodic, iodic, hypoiodous, permanganic, manganic, pertechnetic, technetic, perrhennic, rehnic acids, and their condensation products and optionally bears one or more groups selected from the group consisting of alkyl, fluoroalkyl, alkoxy, flouroalkoxy, alkylamino, fluoroalkylamino, aryl, aryloxy, and arylamino groups, and

wherein the aryl, aryloxy or aryloamino groups optionally bear one or more functionality selected from the group consisting of halo, alkyl, fluoroalkyl, alkoxy, fluoroalkoxy, alkylamino, and fluoroalkylamino groups.